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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,794	04/04/2002	Uwe Krohn	36-1557	1087

7590 03/09/2005  
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EXAMINER

LIANG, GWEN

ART UNIT PAPER NUMBER

2162

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/089,794	<b>Applicant(s)</b> KROHN ET AL.	
	<b>Examiner</b> GWEN LIANG	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because of the following defects:

The title of the application should not be included in the Abstract.

Correction is required. See MPEP § 608.01(b).

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)),

and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**MPEP 2106 IV.B.2.(b)**

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

Claims 1-11 in view of the above-cited MPEP sections, are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. The use of a computer has not been indicated.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 recite the limitation "An apparatus for use in accessing sets of information" or "A method of accessing sets of information" respectively. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 5, 7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al., "Liddy" (U.S. Patent No. 5,963,940), and further in view of Ozawa et al., "Ozawa" (JP Patent No. 7-271798).

With respect to claim 7, Liddy discloses a method ...comprising:

- (i) detecting submission by a user of a search criterion to an information retrieval tool, and a corresponding response from the retrieval tool (Abstract, "The user enters a query and the system processes the query to generate an alternative representation..."; "After processing the query, the system displays query information to the user, indicating the system's interpretation and representation of the content of the query. The user is then given an opportunity to provide input, in response to which the system modifies the alternative representation of the query. Once the user has provided desired input, the possibly modified representation of the query is matched to the relevant document database, and measures of relevance generated for the documents. A set of documents is presented to the user..."; col. 32, lines 46-48, "Matcher 55 takes the QP-based query representation, either unmodified or modified by the user as described above, and finds suitably similar documents in a range of databases.");
- (ii) detecting an indication by the user as to the relevance of a set of information identified in the response from the retrieval tool (Abstract, "A set of documents is presented to the user, who is given an opportunity to select some or all of the documents, typically on the basis of such documents being of particular relevance");
- (iii) storing a reference to the set of information indicated as being relevant at step (ii) (col. 27, line 67 – col. 28, line 6, "...a number occur after the documents are retrieved (including retrieval and display criteria selection, the display of relevant documents in various formats, the marking of relevant documents, the construction of new, informed queries based on the contents of documents deemed highly relevant, and printing or

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storing marked documents...”), and a record of the search criterion submitted by the user at step (i) (col. 32, lines 43-45, ‘The user can also click the “Return to Request” button 370i and modify the query’ wherein it is inherent that the query is stored in the system for the user to be able to go back to modify the query, wherein ‘query’ is analogous to ‘search criterion’).

However Liddy does not explicitly disclose selecting... and calculating, for each search criterion... a weighting indicative of the proportion of users who identified the selected set of information and indicated that it was relevant; and identifying... a recorded search criterion having... a weighting in excess of a predetermined threshold.

Ozawa discloses the steps of:

(iv) selecting one or more: sets of information referenced in the store and calculating, for each search criterion recorded in respect of each of said one or more selected sets of information, a weighting indicative of the proportion of users who, on submitting the search criterion to the information retrieval tool, identified the selected set of information and indicated that it was relevant (page 8, section [0009], “The merits of retrieval efficiency of multiple information retrieval techniques are judged by calculating one retrieval efficiency value for each retrieval technique...”, wherein the retrieval efficiency value is analogous to the weighting as claimed; “...an information retrieval technique evaluation method is proposed such that when the aforementioned data evaluation value is calculated, the actual evaluation value is calculated from the number of people on the minority side and the number of people on the majority side of the external evaluation value according to a predetermined formula”, wherein the “majority”

and the “minority” of people are indicative of “proportion of users”; page 16, “it is judged whether to be data that should be retrieved or data that should not be retrieved from the ratio of the number of people that think it should be retrieved and the number of people that think it should not be retrieved in relational judgment module”, wherein the proportion of people is indicated by ratio of the number of people providing judgment); and

(v) identifying, in respect of said one or more selected sets of information from step (iv), a recorded search criterion having, in respect of each said selected set of information, a weighting in excess of a predetermined threshold (pages 9-10, section [0012], wherein an order calculation means that calculates the respective order of each retrieval technique; pages 10-11, section [0014], wherein the retrieval efficiency is represented using one index. By sequencing the valuation values calculated for at least one or more information retrieval techniques, the merits of each type of information retrieval technique are determined; page 15, section [0030], “Of these input data, the table of information retrieval technique retrieval results, as shown in Figure 3, is composed of a technique number for the retrieval technique, an identifier that represents the set of each retrieval condition and each datum in the database, and a judgment flag that represents whether or not said retrieval technique should retrieve the set represented by each identifier”; page 25, section [0063], “sorting module (74) that arranges and outputs the order value calculated for each retrieval technique in order from the smallest”; pages 16-17, section [0034], wherein a threshold can be set before data retrieval).



It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a method of calculating a weighting indicative of the proportion of users who ... identified the selected set of information and indicated that it was relevant as disclosed in Ozawa into the method of accessing sets of information as disclosed by Liddy to provide a determination means that compares the number of people that think something should be retrieved counted by said counting means and the number of people that think it should not be retrieved, and that determines that said data to be retrieved should be retrieved when the number of people that think it should be retrieved is at or above a predetermined ratio (page 9, lines 9-12). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 9 is rejected for the reasons set forth hereinabove for claim 7 and furthermore Liddy discloses a method wherein, at step (ii), said indication comprises accessing a set of information identified in the response from the retrieval tool (Abstract).

The subject matter of claim 1 is rejected in the analysis above for claim 7, and furthermore Liddy and Ozawa discloses an apparatus having:

a user interface providing access to at least one information retrieval tool (Liddy , col. 4, lines 13-15, "FIG. 8 is a screen shot showing the general features common to most screens used in the graphic user interface (GUI)"; col. 7, lines 35-46, "User interface software 70 allows the user to interact with the system. The user interface software is responsible for accepting queries, which it provides to processing engine 50.

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The user interface software also presents the retrieved documents as a result of the query to the user and reformats the output in response to user input. User interface software 70 is preferably implemented as a graphical user interface (GUI), and will often be referred to as the GUI”);

a store for recording data relating to information retrieval by users (Liddy , col. 6, lines 60-67, “The server’s storage subsystem 35, as shown in FIG. 1, maintains the basic programming and data constructs that provide the functionality of the DR-LINK system. DR-LINK software is designed to (1) process text stored in digital form (documents) or entered in digital form on a computer terminal (queries) to create a database file recording the manifold contents of the text, and (2) match discrete texts (documents) to the requirements of a user’s query text.”; also see Ozawa, page 31, description of Figure 3).

The subject matter of claims 2 and 3 is rejected in the analysis above for claims 7 and 9, and therefore these claims are rejected on that basis.

Claim 5 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Liddy discloses an apparatus wherein said search criteria include words or word phrases and wherein said monitoring means are operable to record words from said one or more search criteria in a stemmed form (col. 5, lines 8-15).

10. Claims 4, 6, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al., “Liddy” (U.S. Patent No. 5,963,940), further in view of Ozawa et al., “Ozawa” (JP Patent No. 7-271798), and further in view of Driscoll (U.S. Patent No. 5,642,502).

Claim 8 is rejected for the reasons set forth hereinabove for claim 7, and furthermore Liddy discloses a method wherein, at step (iv), each said selected set of information is representative of the same category of information (Figure 7). However the combination of Liddy and Ozawa does not explicitly disclose the step of using said identified search criterion ... to search for further sets of information in said category of information.

Driscoll discloses a method wherein the method includes the step: (vi) using said identified search criterion from step (v) to search for further sets of information in said category of information (Abstract, "A user reading and passing through this ranked list checks off which documents are relevant or not. Then the system automatically causes the original search query to be updated into a second search query which can include the same words, less words or different words than the first search query. Words in the second search query can have the same or different weights compared to the first search query. The system automatically searches the text data base and creates a second group of documents, which as a minimum does not include at least one of the documents found in the first group. The second group can also be comprised of additional documents not found in the first group. The ranking of documents in the second group is different than the first ranking such that the more relevant documents are found closer to the top of the list").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a step of using said identified search criterion from step (v) to search for further sets of information in said category of information as

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disclosed in Driscoll into the method of accessing sets of information as disclosed by the combination of Liddy and Ozawa to automatically search the text data base and create a second group of documents, which as a minimum does not include at least one of the documents found in the first group. The second group can also be comprised of additional documents not found in the first group (Abstract). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 10 is rejected for the reasons set forth hereinabove for claim 9. However the combination of Liddy and Ozawa does not explicitly disclose a method wherein, at step (ii), detecting said indication includes measuring the time spent by the user in accessing said set of information.

Driscoll discloses a method wherein, at step (ii), detecting said indication includes measuring the time spent by the user in accessing said set of information (col. 10, lines 18-20, wherein it is obvious that the time spent by a user in data accessing is measured due to the disclosure of the time-saving feature).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a step of measuring the time spent by the user in accessing said set of information as disclosed in Driscoll into the method of accessing sets of information as disclosed by the combination of Liddy and Ozawa to provide features useful to user in saving time and enhancing the quality of the search (col. 10, lines 18-20). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

The subject matter of claims 4 and 6 is rejected in the analysis above for claims 7 and 8, and therefore these claims are rejected on that basis.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy et al., "Liddy" (U.S. Patent No. 5,963,940), further in view of Ozawa et al., "Ozawa" (JP Patent No. 7-271798), further in view of Driscoll (U.S. Patent No. 5,642,502), and further in view of Gray (U.S. Patent No. 5,758,335).

Claim 11 is rejected for the reasons set forth hereinabove for claim 10. However the combination of Liddy, Ozawa and Driscoll does not explicitly disclose a method wherein.. said weighting is adjusted according to the measurements of time spent by users in accessing the respective selected set of information.

Gray discloses a method wherein said weighting is adjusted according to the measurements of time spent by users in accessing the respective selected set of information (col. 2, lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a step of adjusting weighting according to the measurements of time spent by users in accessing the respective selected set of information as disclosed in Gray into the method of accessing sets of information as disclosed by the combination of Liddy, Ozawa and Driscoll because It is desirable to retrieve the data efficiently, as measured in terms of the time it takes to access the data using the I/O operation (col. 2, lines 1-5). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 12:00 P.M. - 8:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

18 February 2005  
G.L.

  
**SHAHID ALAM  
PRIMARY EXAMINER**